

ABSTRACT

5 The present invention relates to an apparatus for
creating a pattern on a workpiece sensitive to radiation,
such as a photomask, a display panel or a microoptical
device. The apparatus comprises a radiation source and a
spatial modulator (SLM) having a multitude of modulating
elements (pixels). It further comprises an electronic
data processing and delivery system feeding drive signals
10 to the modulator, a precision mechanical system for
moving said workpiece and an electronic control system
coordinating the movement of the workpiece, the feeding
of the signals to the modulator and the intensity of the
radiation, so that said pattern is stitched together from
15 the partial images created by the sequence of partial
patterns. According to the invention the drive signals
can set a modulating element to a number of states larger
than two.

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